# COMPONENTS:

- (1) 2-Ethylnaphthalene; C<sub>12</sub>H<sub>12</sub>; [939-27-5]
- (2) Water; H<sub>2</sub>O; [7732-18-5]

## ORIGINAL MEASUREMENTS:

Eganhouse, R.P.; Calder, J.A.

Geochim. Cosmochim. Acta 1976, 40, 555-61.

#### VARIABLES:

### PREPARED BY:

One temperature: 25°C

A. Maczynski

#### EXPERIMENTAL VALUES:

The solubility of 2-ethylnaphthalene in water at 25°C was reported to be 8.00 mg(1)/kg(2) and 5.1 x  $10^{-5}$  mol(1) dm<sup>-3</sup>(2).

The corresponding mass percent and mole fraction,  $x_1$ , calculated by the compiler are 8.00 x  $10^{-4}$  g(1)/100 g sln and 9.22 x  $10^{-7}$ .

## AUXILIARY INFORMATION

### METHOD/APPARATUS/PROCEDURE:

A mixture of 500 mL (2) and 0.001 mol (1) was equilibrated in an Erlenmeyer flask for 12 h (agitation) + 24 h (stationary). The saturated solution, 100 mL, was extracted with hexane, concentrated by evaporation under nitrogen and analyzed by glc. A 5700 A Hewlett-Packard instrument equipped with dual compensating columns and flame ionization detectors was employed.

# SOURCE AND PURITY OF MATERIALS;

- source not specified; analytical grade; used as received; no impurities by glc.
- (2) doubly distilled; free of trace organics.

## ESTIMATED ERROR:

temp. ± 0.5°C

soly. ± 0.1 mg(1)/kg(2)
(from eight determinations)

### REFERENCES: